

State of 911

Webinar Series

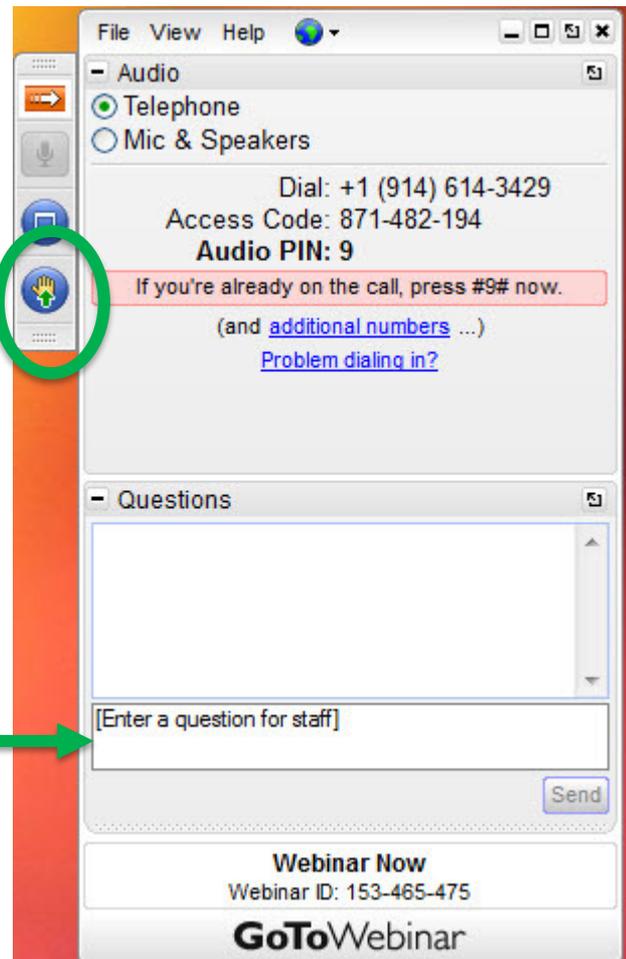
NATIONAL 911 PROGRAM
July 7 & July 14, 2020

State of 911 Webinar Series

- Designed to provide useful information about Federal and State participation in the planning, design, and implementation of Next Generation 911 (NG911) coupled with real experiences from leaders overseeing these transitions throughout the country
- Webinars are typically held every other month and include presentations from a Federal-level 911 stakeholder and State-level 911 stakeholder, each followed by a 10-minute Q&A period
- For closed captioning, please copy and paste the URL link in the chat window to an additional web browser
- For more information on future webinars, to access archived recordings and to learn more about the National 911 Program, please visit 911.gov
- Feedback or questions can be sent to: National911Team@mcp911.com

Questions

Click on “Raise Hand” and your phone line will be unmuted.



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***Using & Sharing 911 Data
Get Involved!***



Speakers

Laurie Flaherty

Coordinator, National 911 Program

Steve McMurrer

911 System Administrator, Fairfax County, Virginia

Jackie Mines

Project Manager, Mission Critical Partners

Agenda

- 911 Data: The Core of Every 911 Story
- Challenges of 911 Data
- Introducing the 911 DataPath Initiative
- Goal #1: Establishing a Common 911 Data Language
- How to Get Involved

Current 911 Data Challenge

Current National Environment:



Siloed 911 systems



Varying data



Inconsistent understanding of data terms

Impact on the 911 Community & Public:



Hinders data use



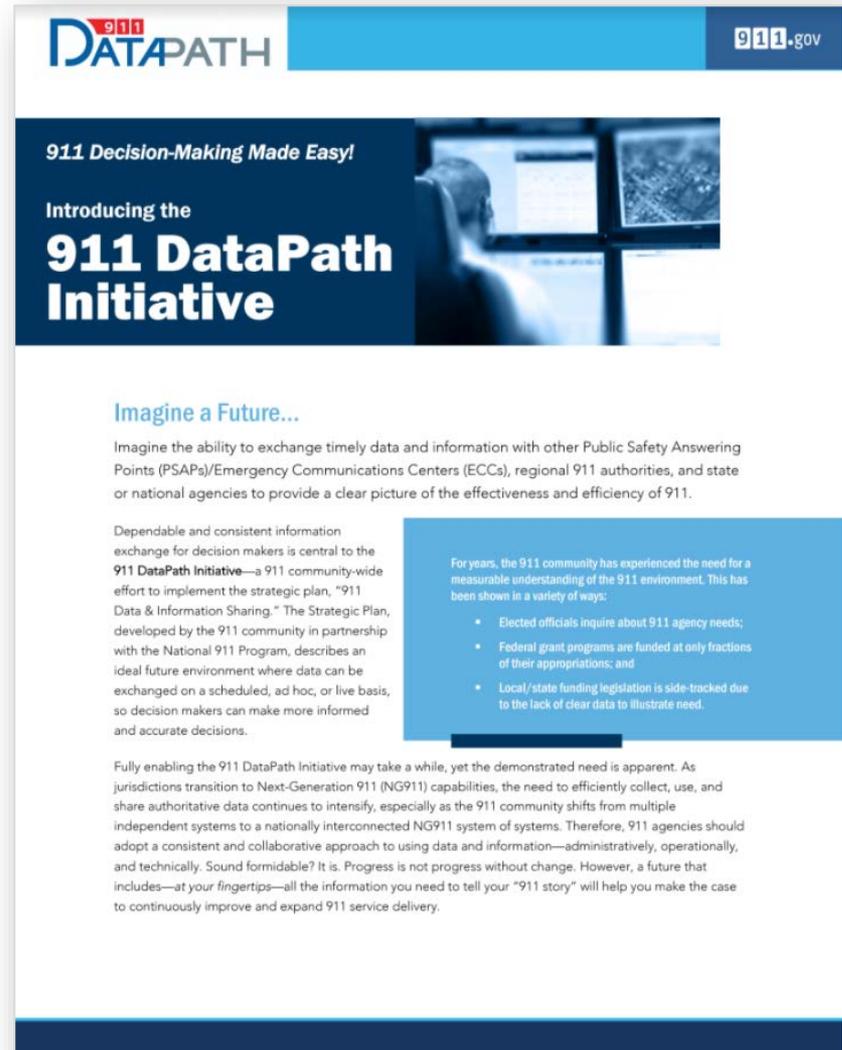
Inhibits service delivery



Compromised incident response

Introducing the 911 DataPath Initiative

- Benefits all of the 911 community
- Will facilitate voluntary, standardized and automated collection, use and sharing of 911 data to support efficient and effective evidence-based 911 decision-making
- Will help 911 community collect, use, and share authoritative data and information



The graphic features a blue header with the '911 DataPath' logo on the left and '911.gov' on the right. Below the header is a dark blue banner with the text '911 Decision-Making Made Easy!' and 'Introducing the 911 DataPath Initiative'. To the right of this banner is a photograph of a person looking at multiple computer monitors displaying data. Below the banner, the text 'Imagine a Future...' is followed by a paragraph about exchanging data and information. A light blue box on the right contains a list of three bullet points. At the bottom, another paragraph discusses the challenges of transitioning to a Next-Generation 911 system.

911 DataPath 911.gov

911 Decision-Making Made Easy!

Introducing the
911 DataPath Initiative

Imagine a Future...

Imagine the ability to exchange timely data and information with other Public Safety Answering Points (PSAPs)/Emergency Communications Centers (ECCs), regional 911 authorities, and state or national agencies to provide a clear picture of the effectiveness and efficiency of 911.

Dependable and consistent information exchange for decision makers is central to the **911 DataPath Initiative**—a 911 community-wide effort to implement the strategic plan, “911 Data & Information Sharing.” The Strategic Plan, developed by the 911 community in partnership with the National 911 Program, describes an ideal future environment where data can be exchanged on a scheduled, ad hoc, or live basis, so decision makers can make more informed and accurate decisions.

For years, the 911 community has experienced the need for a measurable understanding of the 911 environment. This has been shown in a variety of ways:

- Elected officials inquire about 911 agency needs;
- Federal grant programs are funded at only fractions of their appropriations; and
- Local/state funding legislation is side-tracked due to the lack of clear data to illustrate need.

Fully enabling the 911 DataPath Initiative may take a while, yet the demonstrated need is apparent. As jurisdictions transition to Next-Generation 911 (NG911) capabilities, the need to efficiently collect, use, and share authoritative data continues to intensify, especially as the 911 community shifts from multiple independent systems to a nationally interconnected NG911 system of systems. Therefore, 911 agencies should adopt a consistent and collaborative approach to using data and information—administratively, operationally, and technically. Sound formidable? It is. Progress is not progress without change. However, a future that includes—at your fingertips—all the information you need to tell your “911 story” will help you make the case to continuously improve and expand 911 service delivery.

911 DataPath Origin: FCC TFOPA

FCC: Task Force on Optimal Public Safety Answering Point Architecture (TFOPA)

“...a National system enabling the collection of standardized administrative data, operational data, cost data and CAD data should be developed and made available to PSAPs and 911 Authorities to provide essential information to substantiate planning decisions and improvements.”

911 DataPath Origin: 911 Community Input



911 DataPath Initiative—A Strategic Plan

911 DataPath Strategic Plan

The Plan: An Overview

- Enhances *use of 911 data*
- Supports *actionable improvements*
- Driven *by the 911 community*

The logo features the word "911" in white on a red rectangular background, positioned above the word "DATA" in blue. To the right of "DATA" is the word "PATH" in a lighter blue, all-caps font.

A Strategic Plan

Version 1.0 | 2019

The logo consists of the numbers "911" in white on a blue square background, followed by ".gov" in a blue, sans-serif font.

911 DataPath Progress



911 Data Uniformity

Administrative Data for 911 Decision-Making

The First Activity of the 911 DataPath Initiative

As someone responsible for 911 services in your community, you:

- Make decisions about your 911 system's administration, operations, technology, or infrastructure
- Develop and maintain your jurisdiction's first Next Generation 911 (NG911) Plan
- Assess NG911 training costs for your jurisdiction's workforce
- Build Congressional testimony on NG911 funding needs
- Propose legislation that addresses 911 service delivery requirements

And to do all of that (and more), you need reliable data—data that illustrates the importance of the 911 story you need to tell. That data can be the difference between getting the funding you need, the technical solution you want, or the industry change you're seeking. However, when you reach out to collect the data you need, you may find that others label and define the same 911 data points in different ways. These variations can make information gathering and exchange complex and may mean your aggregated data may not accurately reflect what is happening.

The National 911 Program and 911 community are currently addressing 911 data language and exchange issues by identifying and defining data elements relevant to specific 911 topics. Their initial focus is on administrative data necessary for 911 decision-making.

These efforts compose the first focus of the **911 DataPath Initiative**. The 911 DataPath Initiative supports the five goals articulated in the 911 DataPath Strategic Plan, which points to the 911 community's achievement of secure, automated 911 data and information sharing in a nationwide NG911 system. Efforts to build a common language for 911 data support the Strategic Plan's first goal, Data Uniformity, which involves definition of essential 911 data elements for forms of 911 data, and the creation of a standards-based 911 data exchange model. At all stages, priority will be placed on leveraging efforts, resources, and standards that are either in progress or have already been established by 911 community stakeholders.

Why is it important to speak the same 911 data language?

When data elements mean the same thing across the 911 community, stakeholders can exchange information knowing precisely what is being requested and what to provide. When the 911 community shares uniformly defined data, it can tell a stronger story when justifying funding, identifying operational needs, and identifying technical 911 system requirements.

What stories can 911 data elements help illustrate?

- The effectiveness of 911 service delivery
- Current levels of NG911 maturity
- Needs and priorities related to 911 service administration, operations, technology, or infrastructure

June 2019

- The 911 community convened to discuss options for action
- Identified what needs to be accomplished at the national level to achieve a nationally uniform NG911 data system

September 2019

- Articulated the future vision of 911 data sharing in a nationwide NG911 system via the 911 DataPath Strategic Plan

October 2019

- Implemented project to address 1st portion of Strategic Plan's Goal 1 (data uniformity)

911 DataPath: Five Strategic Goals

FROM THE PLAN: 5 STRATEGIC GOALS & OBJECTIVES

1

Data Uniformity

Essential elements of information that are standardized and supportive of interoperability and overall quality assurance of 911 service delivery

2

Automated Data Handling

Collection, use, quality assurance, and security of data and information across disparate 911 systems

3

Role-Based Information Sharing

The right data to the right people at the right time, facilitating evidence-based decisions while protecting privacy

4

Sustainable Vital Support Mechanisms

Governance frameworks, funding sources, and a network of 911 community partners able to maintain a 911 data and information sharing environment for all tiers of governing bodies

5

Data-Savvy 911 Professionals

911 professionals with the skills to apply user-centric approaches to using 911 data

VISION

Routine sharing of 911 data to create actionable knowledge for enhanced public safety

VALUE

Standardized and automated collection, use, and sharing of all tiers of 911 data and information to support efficient and effective evidence-based 911 decision-making

911 DataPath Purpose & Scope

This plan IS intended to:



Be Voluntary



Motivate



Serve

This plan is NOT intended to:



Replace Existing Systems



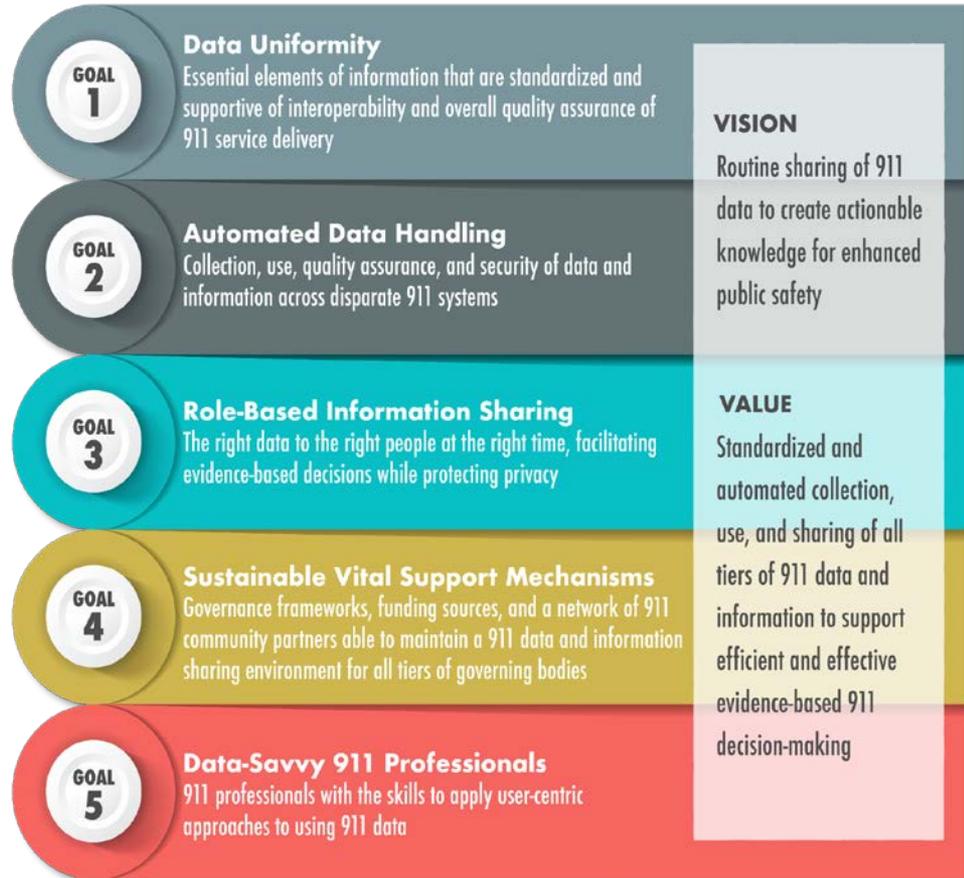
Recreate the Wheel



Required or Mandatory

911 DataPath: Five Strategic Goals

We're Here



911 DataPath: Strategic Goal #1

1

Data Uniformity

Essential elements of information that are standardized and supportive of interoperability and overall quality assurance of 911 service delivery

Identify and Define

Essential elements of information

Create

911 elements dictionary and data model

Categorize

Data by source, collector and user

Collectively, as our first step, we have been working on elements that can be considered **Administrative Data**

How You Benefit

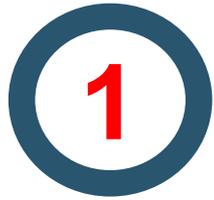
A common language improves our ability to tell the 911 story!

When the 911 community shares uniformly defined data, it can tell a stronger story when justifying funding and workforce needs and identifying technical 911 system requirements



Current Project: Nuts & Bolts

Two Current Project Deliverables



911 Data Dictionary

A reference document that:

- Encompasses the essential data set that addresses the scope statement
- Delineates the single data points that the set comprises (and their attributes)
- Provides data exchange models so the set can be shared



911 DataPath Implementation Framework

A framework for promoting jurisdictional adoption and implementation of the Data Dictionary

Snapshot of the Draft 911 Data Dictionary

Contains data element names, descriptions, use, allowable data, data type, min/max characters, values, exchange tags, reference standards, sources, and sample XML and JSON schema

	A	B	D	E	F	G	H	
	Data Element	Description	Use	Allowable Data	Data Type	Minimum Characters	Maximum Characters	
1	ECC Data Component							
2	ECC Name	Proper name of the ECC	Required	Alphanumeric	String	1	99	
3	ECC ID	ECC Specific unique ID	Required	Alphanumeric	String	1	33	
4	ECC Location	ECC location information in a PIDF-L0 format	Required	Other	Array	1	9999	
5	ESInet URI	Routable ECC URI on the ESInet for calls in IPv4, or IPv6; Text URL.	Optional	Alphanumeric	String	1	99	
6	ECC Type	Type of ECC (Required for first submission and for changes) from the following list of codes P - Primary ECC or PSAP S - Secondary ECC or PSAP B - Back up ECC or PSAP (not staffed) D - Dispatch only ECC (does not receive 911 calls but dispatched resources) O - Other	Optional	Specific List	String	1	1	P,
7	Back UP ECC Activation time	How long will it take to have the back up ECC fully staffed and functioning in Minutes (Mandatory to complete for Back UP ECCs)	Conditional	Numeric	Time	1	5	IS
8	Level of Service	ECC's Highest level of service call type received From the following List: B911 - Basic 911 E911 - Enhanced 911 WPH1 - Wireless Phase 1 WPH2 - Wireless Phase 2 NG911 - Next Generation 911 (transitional, NG End state) DISP - Dispatch Only	Optional	Specific List	String	4	5	B911, E911, WPH1, WPH2, NG911 transitional, NG911 end state DISP
9								Level_of_Service NENA Master Glossary of 9-1-1 Terminology NENA-ADM-000.23-2020

```

Sample XML Data Schema Section
<xs:element name="Header">
<xs:complexType>
<xs:sequence>
<xs:element name="SOURCE" type="xs:string"/>
<xs:element name="SOURCE_TYPE" type="xs:string"/>
<xs:element name="SOURCE_PSAP" type="xs:string"/>
<xs:element name="SOURCE_LNAME" type="xs:string"/>
<xs:element name="SOURCE_FNAME" type="xs:string"/>
<xs:element name="SOURCE_TITLE" type="xs:string"/>
<xs:element name="SOURCE_EMAIL" type="xs:string"/>
<xs:element name="SOURCE_PHONE" type="xs:integer"/>
<xs:element name="Data_Time_of_Data_Start" type="xs:dateTime"/>
<xs:element name="Data_Time_of_Data_End" type="xs:dateTime"/>
<xs:element name="Data_Sharing_Classification_TLP" type="xs:string"/>
<xs:element name="Data_Sharing_Classification_TLP_Detail" type="xs:string"/>
<xs:element name="Notes" type="xs:string"/>
</xs:sequence>
</xs:complexType>
</xs:element>
    
```

```

Sample JSON Data Schema Section
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  "title": "911 JSON Schema",
  "type": "object",
  "properties": {
    "HEADER": {
      "required": ["SOURCE", "SOURCE_TYPE", "SOURCE_PSAP", "SOURCE_LNAME", "SOURCE_FNAME", "SOURCE_TITLE", "SOURCE_EMAIL", "SOURCE_PHONE", "Data_Time_of_Data_Start", "Data_Time_of_Data_End", "Data_Sharing_Classification_TLP"],
      "type": "object",
      "properties": {
        "SOURCE": {
          "type": "string",
          "description": "Jurisdiction name associated with the account used to submit data",
          "minLength": 1,
          "maxLength": 300
        },
    }
  }
}
    
```

Figure 7

Considerations and an Invitation!



How does this effort impact your role?



What challenges lie ahead for you?



Which stakeholder groups might be challenging to engage? Why?



Any additional goals or objectives that should be included?



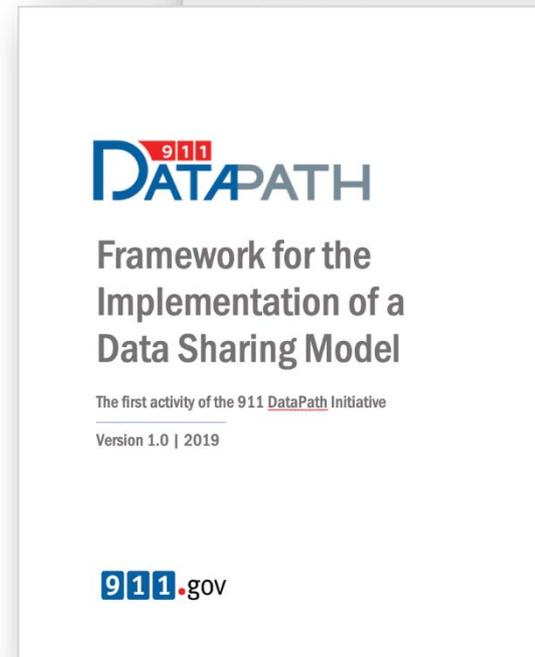
How can your organization contribute to implementation?



What are crucial keys to success?

How to Get Involved

- Provide input on the 911 Data Dictionary and the 911 DataPath Implementation Framework
- Visit www.911.gov
 - Click on “Current Projects”
 - Click on “911 DataPath”
 - Download documents and feedback forms
 - Submit completed forms to [**davidr@consultdpi.com**](mailto:davidr@consultdpi.com)



For additional information please contact:

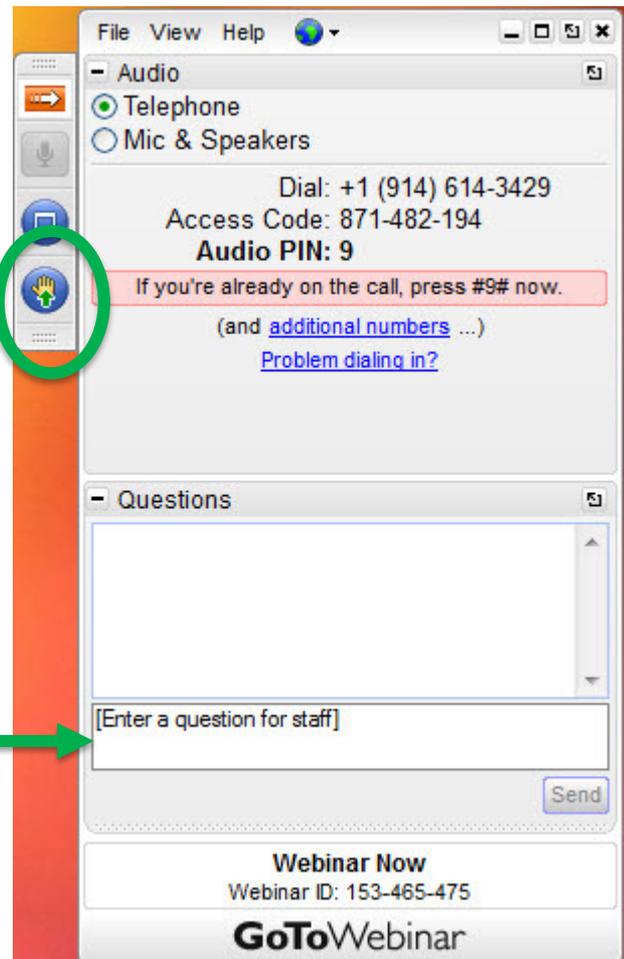
Laurie Flaherty: laurie.flaherty@dot.gov

Jackie Mines: jackiemines@mcp911.com

David Rathbun: davidr@consultdpi.com

Q & A Period

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Future Webinars

- Tuesday, September 8, 2020
- Tuesday, November 10, 2020
- To register, visit:
<https://attendee.gotowebinar.com/register/8495593598854798605>
- Previous State of 911 webinars are available at:
www.911.gov/webinars.html

National 911 Program

- Laurie Flaherty
Program Coordinator
202-366-2705
laurie.flaherty@dot.gov
- Feedback or questions can be sent to:
National911Team@mcp911.com